Appendix B
Advanced Multi-Service Pilot Training at NAS Kingsville, TX
using T-45A/C devices.

1.0 GENERAL.

1.1 Training Site. Appendix B specifies the requirements for the T-45A/C Combined Multi-Service Pilot Training System at NAS Kingsville, TX. T-45A/C Weapon System training will be provided to U.S. military personnel, foreign military personnel, Government personnel and Instructor Pilots as required.

1.2 Training devices to be utilized for instruction are:

1.2.1 Device 2F137A - The 2F137A is a T-45A Instrument Flight Trainer (IFT), with no visual system. The system is equipped with an on-board instructor operator station. This device is designed to provide training in accordance with Interactive Courseware (IAW) appropriate curricula in-flight training instructions to efficiently fly the T-45A/C aircraft, and incorporate a dynamic G-seat, an active anti-G suit, a restraining harness and a buffet-vibration motion cueing system.

1.2.2

1.2.3 Device 2F138D - The 2F138D device is a digital T-45C Operational Flight Trainer (OFT). The device is equipped with a wide-angle visual system and incorporates a dynamic G-seat, an active anti-G suit, a restraining harness, and a buffet-vibration motion cueing system. It is capable of providing training equipment throughout the design base aircraft flight envelope.

1.2.4 Device 2F138E – The 2F138E device is a digital T-45C Operational Flight Trainer (OFT) replacing the current analog 2F138A OFT Trainers. The device is equipped with a wide-angle visual system and incorporates a dynamic G-seat, an active anti-G suit, a restraining harness, and a buffet-vibration motion cueing system. It is capable of providing training throughout the design base aircraft flight envelope.

1.2.5

1.2.6 Device 2C80 - Cockpit Orientation Trainer (COT). The 2C80 trainee station is an authentic reproduction of the T-45 aircraft cockpit depicting the lines of the actual aircraft cockpit and includes a translucent windshield. Maintenance panels located in front and on both sides of the cockpit nose allows access to all switches and controls. The trainer instruments, indicators, controls, and cockpit lighting are actual or simulated aircraft equipment, but do not control or operate the trainer. The device provides basic orientation and training for procedures and instrument/switch locations.

1.2.7 Device Table:

Device Number	Device Type	# of Devices	Standard Mission Length	Brief/Debrief Times (hrs)	Instructor to student ratio
2F137A	IFT	1	1.5	0.5/0.5	1/1
2F138D	OFT	2	1.5	0.5/0.5	1/1
2F138E	OFT	6	1.5	0.5/0.5	1/1
2C80	COT	1	N/A	N/A	N/A

Notes: Devices 2F137A and 2C80 are located in building 2767.
Devices 2F138D and 2F138E are located in building 3788.

1.3 Government Furnished Lecture Classrooms.

1.3.1 Typical Classroom Instructional Objectives. The objective of the classroom training is to provide the student with sufficient training to enable performance of ground, flight and emergency procedures that are taught/conducted in the follow-on stages of simulator flight training.

Bldg #	Room #	Student Capacity	Equipment	Normal (M-F) Availability Hours
2767	111	8	Visuals/TIMS	0600-1800
2767	112	10	Visuals/TIMS	0600-1800
2767	131	20	Visuals/TIMS	0600-1800
2767	143	12	Visual/JMPS	0600-1800
2767	144	20	Visuals/TIMS	0600-1800
2767	141	20	Visuals/TIMS	0600-1800
2767	139	20	Visuals/TIMS	0600-1800
2767	153	8	JMPS	0600-1800

1.4 Government Furnished LRC/CAI Rooms.

1.4.1 Learning Resource Centers (LRC). LRC classrooms are used for Computer Aided Instruction (CAI) lessons, allowing Interactive Courseware (ICW) to be presented directly to the student(s) utilizing TIMS. Instructor supervision within the LRC includes provision of answers to student’s technical questions concerning their assigned lessons and proctoring computer-generated examinations. To qualify in this area, a CI must observe two sessions conducted by a qualified instructor and perform two actual teaching sessions observed and critiqued by a qualified instructor.

Bldg #	Room #	Student Stations	Equipment & Capability	Normal Availability Hours (M-F)
2767	151/152	25	TIMS	0600 – 1800 (CI manning during scheduled events only)

1.4.2 Typical ICW/CAI Classroom Instruction. The instruction in the ICW/CAI Classroom will closely resemble monitoring a learning center. The contractor shall provide a dedicated lead instructor and sufficient additional instructors as required to monitor students in an individual instruction scenario during normal operating hours as specified above. The instructors are not required to provide subject related explanations unless requested by the student/Instructor Under Training (IUT). Instructor(s) shall use TIMS to ensure that students are properly entered in the system and that all lessons are recorded properly.

1.5 Curriculum. The following Master Curriculum Guides (MCG)are required for T-45A/C training at NAS Kingsville:

a. 1542.159 Series: T-45 Combined Flight Training
b. 1542.160 Series: T-45 Combined Instructor Under Training (IUT)
c. 1542.150 Series: T-45 Jet Transition*
d. 1542.167 Series: T-45 Combined Multi-Service Pilot Training System

*Normally there are only one or two pilots a year going through the Jet Transition syllabus.

1.6 CIS Schedule / Primary Responsibility Parameters. Stepladder in force will be assigned by contracted Price Breakout Worksheet.

Hourly Stepladder per Week*	**Device Availability**	**Window of CI Operations ****
900	0600-2230 M-F (16.5 hrs)	0530-2300 M-F (17.5 hrs)
825	0600-2230 M-F (16.5 hrs)	0530-2300 M-F (17.5 hrs)
750	0600-2230 M-F (16.5 hrs)	0530-2300 M-F (17.5 hrs)
675	0600-2230 M-F (16.5 hrs)	0530-2300 M-F (17.5 hrs)

* Hours of instruction per day will be an even distribution of weekly hours above to a five-day work week, with up to 10% variation required. For example, if 500 is the instructional hours per week contracted for, the average hours per day would be 100. Given the maximum amount of variation allowed, the contractor may be required to instruct up to 110 hours on a given day (with anything over 110 being premium time). Also, a total of 500 hours cannot be exceeded for the week without use of premium time. In the event additional instruction hours are needed in excess of the exercised stepladder, the Government will utilize premium time.

** Window of CI operations may be adjusted per Addendum B, paragraph 5.4. The window of CI operations may change during the course of the Task Order (TO).

1.7 Government provided administrative spaces.

BLDG 2767	
Locker Room	Room 219B
Office spaces	Rooms 121, 128, 149, 129, 130 & 216

2.0 INSTRUCTOR QUALIFICATIONS AND CERTIFICATIONS.

2.1 Qualifications. T-45A/C Contractor Instructor Pilot (CIP) Qualifications:

a. Be a former or reserve pilot of tactical jet aircraft or strike pipeline jet aircraft.
b. Possess a minimum of 1,000 flight hours, of which 500 hours were in tactical jet aircraft or strike pipeline jet aircraft
c. Simulator instructors for the Field Carrier Landing Practice (FCLP) and Carrier Qualification (CQ) portions of the curriculum must be former carrier pilots with a minimum of fifty (50) carrier landings (May be waived with government approval).
d. Must possess a bachelor’s degree.
e. Preferably a Contract Instructor Pilot (CIP) would be, or has been a T-45A/C Naval Air Training and Operating Procedures Standardization (NATOPS) qualified pilot or has been a T-45A/C simulator instructor within the preceding five (5) years. It is desired that a CIP have at least one deployed fleet tour and T-45 flight experience to provide a reasonable amount of credibility for the CIP.
f. The contractor may request waivers from the Government regarding any of the above qualifications for an individual on a case by case basis. The COR through coordination with the GTO will decide whether to approve or disapprove such a request.

2.2 CIP Certifications. A CIP must successfully complete the T-45A/C NATOPS open book, closed book, and emergency procedures boldface examinations. A CIP must have a solid understanding of the T-45A/C mission and crew procedures. A strong working knowledge of tactical formation flying, aircraft weapons employment, aircraft carrier operations, and air combat maneuvering is also desired.

3.0 TRAINING.

3.1 INITIAL TRAINING. The Government will provide the following training as necessary and applicable. Training may be provided in the following areas:

a. Standard Operating Procedures (SOPs);
b. Course Rules;
c. NATOPS;
d. Aircraft Systems;
e. Weapons Employment;
f. Weapon System Integration;
g. Syllabus Standardization;
h. Grading Criteria;
i. Basic Simulator Operating Procedures (SOPs);

j. Flight Instructor Training Course (FITC).

3.2 Annual Training requirements/Standardization Checks. The contractor is responsible for maintaining currency of qualifications in accordance with (IAW) paragraph 4.6 of Addendum B (PWS).

4.0 REQUIREMENTS.

4.1 Instruct all simulator events listed in the Master Curriculum Guides. The contractor shall be responsible for conducting all simulator events stated in each Master Curriculum Guide (MCG) listed in paragraph 1.5.

4.2 Instruct classroom events as defined by the Master Curriculum Guides. Per the Master Curriculum Guides listed in para 1.5 above, the Contractor shall be responsible for conducting the classroom events listed in the following tables.

Events T-45 MCGs/students	**Average students per class**	**Duration of each class**	**Frequency**
Engineering	8	33.2	Bi-monthly
Emergency Procedures	8	14.5	Bi-monthly
Basic Instrument Flight Procedures	8	10.5	Bi-monthly
Radio Instrument Flight Procedures	8	10.5	Bi-monthly
Crew Resource Management	8	3.0	Bi-monthly
Operational Risk Management	8	1.0	Bi-monthly
Course Rules	8	4.0	Bi-monthly
NACES Flight Physiology	8	3.0	Bi-monthly
Section, Division, &Night Formation Flight Procedures	8	10.2	Bi-monthly
Familiarization & Night Familiarization Flight Procedures	8	11.2	Bi-monthly
Out-of-Control Flight Procedures	8	2.0	Bi-monthly
Cockpit Orientation	8	7.3	Bi-monthly
Instrument Navigation	8	13.0	Bi-monthly
Weapons Flight Procedures	8	4.7	Bi-monthly
Operational Navigation Flight Procedures	8	3.7	Bi-monthly
Operational Navigation Ground School	8	20.5	Bi-monthly
Instrument Rating Flight Procedures	8	4.0	Bi-monthly
Meteorology	8	4.8	Bi-monthly
Aerodynamics	8	7.5	Bi-monthly

Events T-45 MCG/IUTs	Average students per class	Duration of each class	Frequency
Engineering*	2	33.2	Bi-monthly
Emergency Procedures MFP*	2	14.5	Bi-monthly
Basic Instrument Flight Procedures	2	7.6	Bi-monthly
Radio Instrument Flight Procedures	2	5.5	Bi-monthly
Crew Resource Management*	2	3.0	Bi-monthly
Operational Risk Management*	2	1.0	Bi-monthly
Course Rules	2	3.0	Bi-monthly
NACES Flight Physiology*	2	3.0	Bi-monthly
Out-of-Control Flight Procedures	2	2.0	Bi-monthly
Familiarization & Night Familiarization Flight Procedures	2	4.5/0.5	Bi-monthly
Airways Navigation	2	3.5	Bi-monthly
Formation/Night Formation	2	8.0/2.0	Bi-monthly
Instrument Rating Flight Procedures	2	4.0	Bi-monthly
Cockpit Orientation	2	6.8	Bi-monthly
Weapons Flight Procedures	2	4.7	

*Classes are run concurrently with the SNA classes.

The academic classroom events are normally given twice a month, but occasionally may be held just once or as many as three times a month, depending on the number of student classes scheduled to be loaded for any particular month. IUT classes run concurrently with student classes for the first two weeks and then are separated for accelerated learning. The flight support classroom events average twice a month but may be compressed just prior to detachments and given three or four times that month and zero times in other months.

Contract Instructors are authorized to teach the ONAV courses, but will not be held accountable for maintaining the hardware or supplies. A Contract Instructor will be available as required when hardware/software updates are conducted to verify computer program configurations and operations. Also, Contract instructors may be assigned to instruct additional courses as identified by the Wing GTO, approved by CNATRA N7 and accepted by the contractor.

4.3 Provide Instructor(s) for the LRC, as required, during the normal operating hours during the scheduled events only, listed in paragraph 1.4.1. It is the contractor’s responsibility to be available to answer questions and to assist the students should they have problems with the content of the ICW, the functionality of the lessons, or the student management system. All curriculums are supported in the same LRC.

4.4 Student Training Material:

a. All Lecture guides	At Book Issue or on-line
b. NATOPS	At Squadrons or on-line
c. TW-2 In-Flight guides	At Squadrons or on-line
d. TW-2 SOP	At Squadrons or on-line
e. All Flight Training Instructions (FTIs) and Student Lesson Guides	At Book Issue or on-line

Note: The CI is responsible for ensuring that the content of instruction he provides is appropriate to all current and implemented instructional materials and CNATRA Instructions/Notices. All instructional material is distributed from the wing via the training department. The Wing STAN division normally will be tasked with making sure the contractor has received the latest training materials prior to their implementation.

4.5 CIS Platform Specific Primary Responsibilities. Refer to Addendum B, paragraph 4.1.1.

4.6 CIS Platform Specific Additional Support Responsibilities. For Additional Support Responsibilities not covered in this Appendix, refer to Addendum B paragraph 4.1.3. Except for the Additional Support Responsibilities that are automatically authorized in section 4.6.1, the TW-2 GTO will provide the contractor a list of approved Additional Support Responsibilities, and the time authorized for each, for the upcoming work week on the last work day preceding the following work week. The Weekly A004 will reflect the time spent on approved ASRs.

4.6.1 The following Additional Support Responsibilities are automatically authorized by this instruction:

a. Conduct CI Standardization checks in the absence of available Government representative IAW CNATRAINST 3710.13F: Initial, Annual, and 90 Day re-qualification standardization checks.

4.6.2 The following TW-2 Additional Support Responsibilities that may be assigned by the GTO include, but are not limited to the following:

a. Making TIMS inputs to SNA grade sheets outside of regularly scheduled event.
b. Recording simulator companion events.
c. Recording simulator demonstration events.
d. Providing support for COMS contractor for simulator related issues.
e. Providing support for simulator upgrades or improvements.
f. Providing training/SME efforts for Multi-Service Pilot Training System (MPTS).

4.7 CIS Platform Specific Collateral Responsibilities. Refer to Addendum B, paragraph 4.1.4.

4.8 CIS Scheduling – Technical/Training Data. Ground School lectures are scheduled by the Wing Ground Training Office and sent to the contractor’s scheduling desk. Simulators and post Ground School lectures are scheduled by Wing Strike-ops and coordinated with the Ground Training Department and the contractor’s scheduling desk. Class dates are tentatively set six (6) months in advance, but minor changes may occur.

Ground School calendars are sent out four to five (4-5) days before the beginning of a new class. The duration of Ground School is normally three (3) weeks. Simulators are scheduled the day prior to the event.

4.8.1. Weekly Planning Estimate. The Wing Scheduling Authority will provide the Contractor an estimated weekly scheduling plan for the following week by 1200 on the last work day preceding the next work week. The requested daily schedule should not change numerically by more than plus or minus 10 events from the weekly estimate. Due to fluctuating schedules, the weekly schedule may be updated by 1200 on Monday for Wednesday, Thursday and Friday of that week in order to maintain the plus or minus 10 event variance. In addition, the approximate number of Carrier Qualification and Weapon events, to include their classroom lectures, should be identified when the daily request is submitted on Wednesday for Friday and Saturday of that week, if any of those type events are required.

4.8.2 Daily Scheduling Process. Wing Scheduling Authority forwards Squadron and Wing simulator and lecture requirements to the GTO. The GTO will then review the daily request to ensure it is within plus or minus 10 events of the Weekly Planning Estimate and forward it to the contractor. The contractor then writes a scheduling template based on submitted requirements by balancing available contractor resources with Flight Instructor Standardization and Training (FIST) program qualifications. The contractor then inputs the simulator template into TIMS within two hours of receipt from GTO (provided there are no major changes)and the Wing Scheduling Authority inputs SNAs, IUTs and MCG events into the TIMS simulator template matching FIST qualifications and ensuring the event is opted. After coordinating with the contractor for CI resources, the GTO department then inputs all lectures into TIMS. The schedule is approved by 1500 the day prior to execution. The scheduling authority may make changes to the schedule prior to 2000 by replacing a student in a simulator event as long as the Contract Instructor is qualified to instruct the new student event in accordance with the published FIST.

5.0 CIS Scheduling Authority.
The squadron’s designated officer(s) who is appointed by the squadron’s Commanding Officer has the authority to develop and approve the schedule (ground/simulator/flights).